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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/370,696	08/09/1999	SIMON H. LIGHTBODY	6270/26	8394

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EXAMINER

EDWARDS JR, TIMOTHY

ART UNIT PAPER NUMBER

2635

DATE MAILED: 04/25/2002.

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER
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15

DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

SEE ATTACHMENT

Timothy Edwards  
Primary Examiner  
Art Unit: 2635

Office Action Summary

Application No.

09/370,696

Applicant(s)

LIGHTBODY ET AL.

Examiner

Timothy Edwards

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-28 and 30-51 is/are rejected.
- 7) ☐ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

Examiner reminds applicant that the examiner did not receive copies of IDS dated October 22, 1999. Examiner will not initial the PTO form 1449 citing these references and documents. Examiner requests the applicant resubmit these references and documents. Copies of PTO form-1449 will accompany this action.

With respect to applicant argument, support for language of claims 10,11,14-16,31,40 is located on page 25, lines 20-21, does not recite a "second circuit comprises at least one relay". Page 25, lines 20-21 states as the I/O microprocessor receives a data packet containing the output state of a device (the shutting down of a load by the revenue meter when a device (i.e. a fan) changes its output state), from the revenue meter. The output state is utilized by relay hardware, for example, to turn a load off and on. Which device is the "second electric circuit"?

With respect to applicant argument, support for claims 12, 32 and 41 can be found on page 3, lines 16-20 is not found by examiner. Examiner cannot find language that states, "the second electric circuit comprises between a 4 to 20 mA transducer".

### ***Specification***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 10,11,12,14-16,31,32,40,41 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Examiner cannot find language in the specification to support 'the second circuit comprises at least one relay'. With respect to claims 12,32,41 examiner cannot find language in the specification to support 'the second electrical circuit carries a second signal between 4mA to 20mA'.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second electric circuit, the relay and the transducer must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Response to Arguments***

Applicant's arguments filed Feb 15, 2002 have been fully considered but they are not persuasive. As set forth in Examiner's Response.

**Applicant's Arguments:**

Page 4, 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs 1) Lightbody et al fails to disclose or suggest that any of his external devices includes an I/O device, which communicates I/O signals according to the claimed invention; 2) Lightbody et al fails to disclose or suggest the claimed separate or external I/O device; 3) Lightbody et al fails to disclose or suggest "wherein the I/O and communication device connects to at least one second electric circuit".

**Examiner's Response:**

With regard to parts (1 and 2), Lightbody et al discloses external devices, which includes an I/O device (see col 5, lines 1-10 and fig 1, items 72, 74 and 20). Examiner considers devices that can receive an input from a device and communicate an output to that device as an I/O device. An I/O device that communicates I/O signals according to the claimed invention is not specifically claimed, so this argument is moot.

With regard to part (3), examiner directs applicant's attention to col 6, line 66 to col 7, line 7 Lightbody et al addresses the use of a LAN and WAN network this would suggest an external I/O and communication device connected to a second electric circuit.

Lightbody et al discloses the use of a Model 7700ION power meter. Applicant submitted (IDS), 3-Phase Power Meter, Analyzer and Controller specification paper which detailed the Model 7700 ION revenue meter. Page 3, of the specification shows a Model 7700 ION meter connected to external I/O devices. This would suggest the Model 7700 ION meter suggested by Lightbody et al has the capability to connect to external I/O devices.

Therefore, examiner maintains rejection dated Dec 6, 2001. Examiner is still of the opinion the Lightbody et al reference is pertinent to the present application.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,12,18,25-28,32-37,39,41,42,44,45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lightbody et al.

Considering claims 1, and 26 Lightbody et al discloses a) a revenue meter for measuring electrical energy (see col 5, lines 11-47, fig 1, item 10); b) an interface link (see fig 1 items 22 and 73); c) an I/O device (see col 4, lines 29-32, fig 1, items 20,72 and 74); d) I/O device connected to a second circuit is not specifically recited by Lightbody et al. however, in col 6, line 66 to col 7, line 7 Lightbody et al addresses the use of a LAN and WAN network this would suggest an external I/O and communication device connected to a second electric circuit.

Considering claims 2,27,39,45 Lightbody et al discloses the limitation of this claim in col 9, lines 21-24.

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Considering claims 3,18,28,42,44 the I/O device is powered by the revenue meter is not specifically recited by Lightbody. However, one of ordinary skill in the art would readily recognize the need for a power source for an I/O device, which is in communication with another electronic device. Therefore, it would have been obvious to one of ordinary skill in the art to use an available power source, a battery or any type of power source because a power source is inherently needed in the device.

Considering claims 12,32,41 Lightbody et al does not specifically recite a second electric circuit carries a second signal comprising 4mA to 20mA. However, in col 5, lines 1-10 and col 6, line 66 to col 7, line 7 Lightbody et al discloses the sending and receiving of information from an I/O devices over a serial communication bus.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the serial bus of Lightbody et al to include a 4mA to 20mA signal because Lightbody et al discloses the desire to transmit and receive data via serial bus. The use of 4mA to 20mA signal is well known in the art.

Considering claim 25, Lightbody et al does not specifically recite error detection using cyclic redundancy check. However, in col 15, lines 41-47 Lightbody et al disclose error checking displayed data. Therefore, it would have been obvious to one of ordinary skill in the art to use a type of data checking which is known in the art because Lightbody et al suggest the use of error checking of data.



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Considering claim 33 Lightbody discloses the limitation of this claim in col 5, lines 1-10 and fig 5, items 136 and 137.

Considering claim 34, Lightbody discloses the limitation of this claim in fig 2, items 20 and 30-38.

Considering claim 35, Lightbody et al discloses the limitation of this claim in fig 2, item 16.

Considering claim 36, Lightbody et al does not specifically recite an expandable interface link. However, in col 5, lines 1-10 and col 6, line 66 to col 7, line 7 Lightbody et al addresses the connection of the revenue meter to several devices and the use of appropriate cable for these connections. Therefore, it would have been obvious to one of ordinary skill in the art to modify the Lightbody et al system to enable this system for future expansion because Lightbody et al addresses the use of several I/O devices.

Considering claim 37, Lightbody et al discloses the limitation of this claim in fig 1, items 20,74,72.

Considering claim 46, Lightbody et al discloses the limitation of this claim in col 6, lines 42-48.

Claims 4-7,23,30,43, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lightbody et al and further in view of Power Measurement ION 8500 (Direct Access Billing Meter, Quick Facts Sheet) submitted IDS.

Considering claims 4,23,30,43 revenue meter timestamps one input of the I/O device is not specifically recited by Lightbody. However, events in col 14, lines 49-61 Lightbody disclose the logging of events and in fig 5, a real time clock. Power Measurement (Direct Access Billing Meter, Quick Facts Sheet) teaches a revenue meter having means to log set up changes in the meter and event logging and timestamp the sequence-of-events. Therefore, it would have been obvious to one of ordinary skill in the art to use time stamping of event data as taught by Power Measurement because Lightbody discloses the desire to record the modification of meter values and parameters.

Considering claims 5-7, a bayonet terminal revenue meter mateable with matching jaws of a detachable meter mounting device and a draw out meter enclosure is not specifically recited by Lightbody. However, applicant admits in figs 1-3 and pages 8-10 of his specification this type of meter is well known in the art. Obvious to use a meter which is available off the shelf produced by ION 8500 or other mention manufactures.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 8,9,13,17,19,20-22,24,25 and 47-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Lightbody et al '034.

Considering claims 8,47 Lightbody et al discloses a) an I/O device for use with a revenue meter (see fig 1, items 20,74,72); b) the revenue meter measuring the delivery of electrical energy to a consumer (see col 2, lines 44-48 and fig 1, items 10 and 52); c) I/O device comprising a connector for interfacing with the revenue meter (see fig 1, items 23 and 70); d) I/O device is physically separated from the revenue meter (see fig 1 and 2); e) a microprocessor operative to process and communicate at least one I/O signal (see col 6, line 66 to col 7, line 7 and col 9, lines 21-24).

Considering claims 9,13,19,20 Lightbody discloses the limitation of this claim in col 12, line 31 to col 13, line 5.

Considering claim 17, Lightbody et al discloses the limitation of this claim in col 6, lines 56-59.

Considering claim 21, Lightbody discloses the limitation of this claim in fig 2, items 72 and 70.

Considering claim 22 Lightbody discloses the limitation of this claim in col 5, lines 1-10 and fig 5, items 136 and 137.

Considering claim 24, Lightbody discloses the limitation of this claim in col 15, lines 43-47.

Considering claim 48, Lightbody et al discloses the limitation of this claim in fig 1, items 70 and 23.

Considering claim 49, Lightbody et al discloses the limitation of this claim in fig 1, items 20,72 and 74.

Considering claim 50, Lightbody et al discloses the limitation of this claim in col 5, lines 1-10 and col 6, line 66 to col 7, line 7.

Considering claim 51, Lightbody et al discloses the limitation of this claim in fig 5, items 136 and 137.

### ***Allowable Subject Matter***

Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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1. Any inquiry concerning this communication should be directed to Examiner Timothy Edwards at telephone number (703) 305-4896. The examiner can normally be reached on Tuesday-Friday, 8:30 a.m.-4:00 p.m. The examiner cannot be reached on Mondays.

If attempt to reach the examinee by telephone are unsuccessful, the examiner's supervisor, Michael Horabik, can be reached on (703) 305-4704.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or fax to:

(703), 872-9314 (for formal communications intended for entry)


Or:

(for informal or draft communications, please label "PROPOSED"

or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

  
Timothy Edwards  
Primary Examiner  
April 23, 2002